

**MAGNETICALLY ACTUATED MICRO-ELECTRO-MECHANICAL APPARATUS AND METHOD OF MANUFACTURE****Abstract of the Disclosure**

An array of magnetically actuated MEMS mirror devices is provided  
5 having stationary magnets configured to provide strong magnetic fields in the plane of the mirrors without any magnets or magnet-system components in the plane of the mirrors. Also, a magnetically actuated mirror device is provided that includes an improved actuation coil configuration that provides greater torque during mirror actuation. In addition, a mechanism is provided to detect  
10 the angular deflection of a moveable mirror. Also, an improved process is provided for manufacturing MEMS mirror devices.

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